

Lubricant PTFE properties

PTFE can be used as an additive to improve lubricant and tribological properties of thermoplastics, paints, coatings, greases, and inks.

PTFE lubricants (concentration ranging from 1% up to 20%):

- inert to practically all chemical solvents;
- UV and weather resistant;
- excellent electrical insulator;
- enhance abrasion resistance;
- reduce friction coefficient and mechanical wear;
- reduce surface contamination;
- improved thermal stability;
- modify appearance.

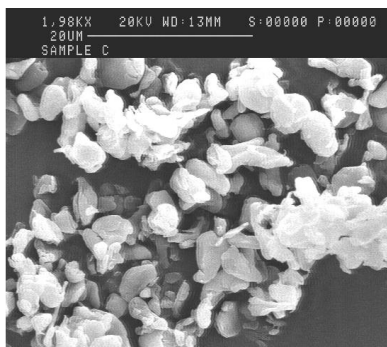


PTFE powders are excellent lubricant additives in conditions where conventional additives, such as graphite or molybdenum disulfide are unsuitable

Two kinds of lubricant PTFE powders

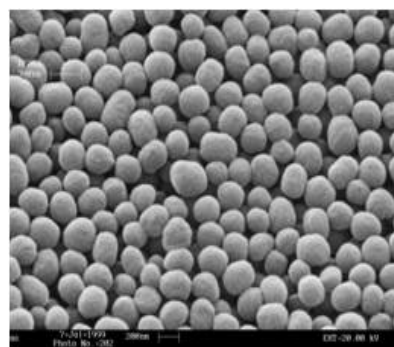
made by

polymer suspension



irregular/agglomerates

polymer emulsion



regular/spherical

LUBEFLO[®] K Grade	PTFE from Suspension Polymer
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Typical Applications	K 100	K 201	K 301	K 401	K 301 FDA	K 401 FDA
Plastics	●●●	-	●●●	●●●		●●●*
Plastics – High Temperature	●●●	-	●●	-	-	●*
Rubbers	-	-	-	-	-	-
Oil & Greases	-	-	●●●	●●	●●●*	-
Spray Mold Release	-	●●●	-	-	-	●●●*
Paints & Coatings	-	●	●●	-	●●●*	-
Waxes	-	●	●●	●●●	●●●*	-
Inks	-	●●●	●●	●●	●●●*	●●*

Legend:

- = good
- = better
- = best

* = Meets the requirements of FDA 21 CFR 177.1550 and European Directive 2002/72/EC

Physical properties	Unit	K 100	K 201	K 301	K 401	K 301 FDA	K 401 FDA
<i>Average value</i>							
Bulk Density	g/l	450	500	500	420	400-500	400-500
Avg.part.size (d50)	µm	13	4	6	8	6	8
Part.less than 20 microns	%	67	99,9	99,9	96,6	99,9	96,6
Specific surface area	m ² /g	-	3,8	3,0	2,8	4,0	4,0
Colour	white	white	white	white	white	white	white
Melting point	C°	340	320-325	320-330	320-330	320-335	320-335
Melt flow index at 380°C	g/10 ^l (21kg, 1mm die)	-	-	-	0,25	0,05	0,05
Specific gravity at 23°C	-	2,16	2,16	2,16	2,16	2,16	2,16
Food contact approval	EC/USA	YES	No	No	No	YES	YES

LUBEFLO [®] KP Grade	PTFE from Dispersion Polymer
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Typical Applications	KP650
Plastics	-
Plastics – High Temperature	-
Rubbers	●●●
Oil & Greases	●●
Spray Mold Release	●●
Paints & Coatings	●●
Waxes	●●
Inks	●

Legend:

- = good
- = better
- = best

Physical properties	Unit	KP650
<i>Average value</i>		
Bulk Density	g/l	450
Avg. part. size (agglomerated powder)	µm	7
Specific surface area	m ² /g	8
Colour	white	white
First Melting point	C°	325
Acidity (HF cont)	ppm	4-5 (low)
Specific gravity at 23°C	-	2,16
Food contact approval	EC/USA	YES

This information is based on our experience to date and we believe it to be reliable. It is intended only as a guide for use at your discretion and risk. We cannot guarantee favourable results and assume no liability in connection with the use of the products described. None of these information is to be taken as a license to operate under, in order to infringe any patents.

